Job Category: Plumber (For Specifics See Below*)

Required and/or recommended personal protective equipment: Respirator/dust mask, eye protection, safety glasses/goggles, gloves, ear protection, protective clothing/shoes

Sequence of Basic Job Steps	Potential Hazards	Recommended Action or Procedure
Grinders	Flying metal pieces	Wear protective goggles and gloves when needed.
Hand tools	Hand, eye injuries	Use eye protection as needed. Keep tools used for cutting, sharp at all times. Never use screwdrivers as chisels or pry bars. Never use cheaters, get a larger tool if needed. Never alter a tool. If metal chisel is mushroomed, do not use until it is ground down. Use tools only for the intended use.
Booster pump	Electric shock	Turn power off at main breaker. Open valves and drain water.
Power saw operation	Hand, eye, ear, and lung injuries	Insure all guards are in place. Insure blade is sharp and set at proper depth. Turn dust collection system on, if provided. Use pus sticks when working in close proximity to saw blade. If noise level is high, use ear protection. Wear dust mask if dust collection is not provided. Use proper blades for material being cut. Use support system when working with long materials. Turn machinery off when not in use. Use no tools until you have been trained in its use and have read and understood its operating and safety manual.
Air powered nailer	Eye and puncture injuries	Never use tools with inoperable or bypassed, safety features. Never shoot nail guns while any part of your body or anyone is in line of fire. Never use an air tool with the pressure set above its safe operating capacity. Use safety glasses or goggles. Use no air tool until you have been trained in its use and have read and understood its operating and safety manual.
Hot molten substances	Skin, eye and respiratory irritation	Wear protective clothing, shoes, goggles and mask when needed. Use caution when moving in area where wet surfaces may exist. Observe all no smoking rules near flammable substances.

Job Category: Plumber (For Specifics See Below*)			
Sequence of Basic Job Steps	Potential Hazards	Recommended Action or Procedure	
Vehicle operation, loading, and towing	Collision, Load loss, hand and back injuries	Do not consume alcoholic beverages or other intoxicants prior to or during work hours. Obey all posted speed limits. Drive defensively. Wear seat/shoulder belts at all times. Use mirrors before backing up. Use extra caution when driving in student areas. Do vehicle safety checks each day prior to use. Do not drive vehicles that do not clear safety check. Wear gloves when loading and unloading. Get assistance when loading or unloading heavy objects. Use proper body mechanics to avoid back injury. Secure all lumber, ladders, scaffold, etc. securely prior to moving vehicle. Never overload a trailer or vehicle. Always secure trailers with an approved safety chain. Always set emergency brake when parking a vehicle.	
Painting or finishing with toxic materials	Skin, eye and respiratory irritations, allergies, slips and falls	Wear respirator, gloves and eye protection when needed. Work in well ventilated areas. Clean up all spills on floor immediately. Keep working area clear of materials and scattered tools. Observe no smoking rules near flammable substances.	
Powder Actuated tools	Eye, ear and puncture injuries	Never use powder actuated tool unless you are licensed by its manufacturer or its representative to do so. Use eye and ear protection. Never shoot into a wall that has occupants behind it. Never point tool at self or others. Use tool only as prescribed by the manufacturer.	
Water cooler	Electric shock, hand caught in moving parts	Turn power off at main breaker prior to working on unit.	
Repair boilers	Scalding, electric shock, electrocution, burns from fire	Cool down boiler prior to repair. Turn motors off. Coordinate repair with electrician. Wear protective clothing as necessary.	
Sewer rooter	Clothing and hands caught in rooter. Electric shock	Wear gloves. Do not wear loose fitting clothes. Use grounded extension cord.	

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Sequence of Basic Job Steps	Potential Hazards	Recommended Action or Procedure	
Hand-held power tools	Hand, eye, ear, shock injuries	Never remove ground prong from tools or cords so it will work in receptacles that have no ground. Repair or replace frayed or damaged cord prior to using. Never use power tools while standing on wet or dampened surfaces. Never bypass safety devices or work with tools where guards are not operable. Use two hands on power tools designed for two hand operations. Use sharp bits and blades. Use tools only for use they were intended. Use no tools until you have been trained in its proper use and understand the safety rules of that particular tool. Use eye and ear protection as needed.	
Ladders	Falls, hand, back, shock injuries	Never use a metal ladder near electrical conduits or power lines. Never use stepladder leaned against a wall. Extension ladders must extend at least 3 feet above a roof or landing. Never use extension ladders to reach heights greater than 44 feet. Use scaffolds. Set ladders at 75 degree with the floor or ground. The horizontal distance from the wall to the foot of the ladder should never be more than ½ the ladder's length. Never go up or down a ladder with tools in your hand. It is best to raise them using a bucket and rope. Always face the ladder and grasp the side rails or rungs with both hands when going up or down, taking one step at a timedo not hurry. One person at a time on a ladder. Check ladder for cracked or split side rails, for missing or broken or otherwise defective steps (cleats, rungs, treads or U-shapes). Check for sharp edges and splinters on cleats, rungs, and side rails. Check for general weakened conditions. Keep ladder clean. If found to be unsafe, withdraw it from use and fix it at once, if possible. If irreparable, destroy it immediately to make sure it will never be used	

Job Category: Plumber (For Specifics See Below*)		
Sequence of Basic Job Steps	Potential Hazards	Recommended Action or Procedure
		again. Never stand on the top or next to the top rung of ladder, which does not have a guardrail. Select the right type of ladder for the job to be done. Do not use two ladders spliced together. Do not use light household ladder for a heavy construction job. Make sure the ladder is not placed on a loose object or on uneven footing. To prevent slipping, equip the ladder with nonslip points or safety shoes, if practical. If not, secure the ladder firmly by lashing it with rope or by other means. Do not lean a ladder against a moveable object or against window sashes. Fasten a board securely across the top of the ladder to give a bearing on each side of the window. See that a helper stands guard in dangerous circumstances, as when a ladder is in front of a door. If there is a danger of a person or vehicle bumping into the ladder, have a helper stand guard or rope off the space with caution tape around the ladder. Remove any oil or grease from the soles of your shoes before using the ladder. Never work above the second rung from the top of a straight ladder. Hold on with one hand when working from a ladder. Do not over reach and do not push or pull if it will cause the ladder to move. If you are far away from something you have to reach, take time to move the ladder closer. Do not straddle the space between the ladder and another object. Do not work on a ladder in high winds. Use stepladders less than 10 feet long, if possible. Never use a stepladder more than 20 feet long. Do not work higher than the second or third step
		from the top. Open the stepladder all the way and lock the spreader. Do not use stepladders with chain/rope spreaders. Fixed ladders should be
		placed so that there is a clearance of at least 24 inches on the climbing side, and they should be

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Sequence of Basic Job Steps	Potential Hazards	Recommended Action or Procedure	
Ladders (continued)	Falls, hand, back, shock injuries (continued)	built out from the building at least 6 inches. Fixed ladders should be fastened securely throughout their length. Refer to the construction safety orders for ladder standards for construction and painting trades.	
Scaffolds	Falls, broken bones, cuts, scrapes, back injuries	Inspect scaffold prior to use. Erect the scaffold to a comfortable working height. Do not jump from a landing or scaffold. Keep work surface clear of tools and debris. Lock all joints when erecting metal scaffolds. Do not, except under specific conditions, ride a moving scaffold. Do not allow platform planks on rolling or tower scaffolds to overhand support more than 18". Use outriggers on, or anchor, scaffolds with a ration greater than 3 feet of height to 1 foot of base to prevent tipping. Always level your scaffold. Do not use ladder jack scaffold when height is over 16 feet. Be certain there are never more than two people on a ladder jack platform. Do not use ordinary ladders as planking even though a working surface has been placed over the rungs. Use a safety line for each person on ladder jack platforms 10 feet high or more. Do not place ladders on top of rolling scaffolds. Set a ladder jack so the plank is level or slants into the building. Do not use ladder jack wider than 16 feet center-to-center and only 12 feet where single dressed 2 inch by 14-inch planks are used.	
Chemically, emotionally and psychologically imbalanced students	Physical harm	Contact college police for assistance and protection if student appears to be out of control. Use non-aggressive communication skills.	
Office work (after hours, evenings/weekends)	Physical harm	Lock office door if working late at night and alert college police of your presence on campus.	
Date: July 2, 1991 / Analysis By: Clarice Bettencourt / Reviewed By	y: Pete Sorrell	· · · · · · · · · · · · · · · · · · ·	

^{*}Note: This Job Safety Analysis form includes the following positions in the Los Rios Community College District: Lead Plumber; and Maintenance Plumber